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10/700,513

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EXAMINER

ADHAMI, MOHAMMAD SAJJID

ART UNIT

PAPER NUMBER

2471

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/700,513	<b>Applicant(s)</b> OKAGAWA ET AL.	
	<b>Examiner</b> MOHAMMAD ADHAMI	<b>Art Unit</b> 2471	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8, 14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8, 14, 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

- Applicant's amendment filed 3/18/2011 is acknowledged.
- Claims 8,14, and 16 have been amended.
- Claims 1-7,9-13,15, and 17 are cancelled.
- Claims 8,14, and 16 are pending.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the address conversion information acquired from the first router" in line 19. There is insufficient antecedent basis for this limitation in the claim.

In claim 8, the claim limitations related to requesting deletion of the first address conversion information are confusing. The routing controller requests the second router to delete the first address conversion information. The second router requests the routing controller permission to delete the first address conversion information and deleting it upon receiving permission. The two limitations together are confusing. If the router controller requests the second

router to delete the first address conversion information, then why does the second router request it also?

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8,14, and 16 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Tirosh (US App. 2003/0141093) in view of Kimchi (US App. 2002/0120760).

**Re claims 8,14, and 16:**

Tirosh discloses *a routing controller configured to switch a routing path between routers from a first routing path to a second routing path* (Fig.1 ref.400 and Para.[0020] The QoS management system may instruct the dynamic routers where to route media stream data traffic and Para.[0011] A network manager unit may dynamically update the dynamic router such that the set of possible output path is changed and Para.[0021] providing information for routing and Para.[0026] and Fig.1 shows a first routing path and a second routing path).

Tirosh further discloses *a first router located on the second routing path* (Fig.1 ref.100b,100c, or 100d can be a first router).

Tirosh further discloses *a second router located on a demarcation point of the first routing path and the second routing path* (Fig.1 ref.100a is a second router and the paths to the various dynamic routers are first and second routing paths).

Tirosh further discloses *the router controller includes a trigger receiver configured to receive a trigger indicating a congestion or a occurrence of a failure on the first routing path, or to receive a trigger indicating a need to route via the first router in a case where the first router has a service control function including an accounting function, a monitoring function or a media converting function* (Fig.1 ref.400 and Para.[0038-0040] sending a trigger when a fault is detected – where the determined need to route through a first router is rerouting because of a fault of a topology change and Para.[0031] The application layer may handle such functions as accounting of consumed bandwidth).

Tirosh further discloses *an address information provision requester configured to request provision of address conversion information to the first router in accordance with reception of the trigger* (Para.[0021] may instruct the dynamic routers where to route data traffic and Para.[0026] A dynamic router may force the packet to be forwarded to the stream's final destination by placing on the packet the IP address of the next-hop dynamic router. A path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the various controllers may be

responsible for communication and specific activities related to their controller entities).

Tirosh further discloses *an address conversion information creation requester configured to request creation of first address conversion information, which associates a destination address of received data with an IP address of the first router, for converting data destined for a destination terminal to data destined for the first router* (Fig.1 ref.200e is a destination terminal and Para.[0021] may instruct the dynamic routers where to route data traffic and Para.[0026] A dynamic router may force the packet to be forwarded to the stream's final destination by placing on the packet the IP address of the next-hop dynamic router. A path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the various controllers may be responsible for communication and specific activities related to their controller entities).

Tirosh further discloses *to request creation of second address conversion information for converting data destined for the first router to data destined for the destination terminal, based on the address conversion information acquired from the first router* (Para.[0021] may instruct the dynamic routers where to route data traffic and Para.[0026] a path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the

various controllers may be responsible for communication and specific activities related to their controller entities).

Tirosh discloses *an address conversion information change requester configured to request the second router to change the first address conversion information* (Para.[0021] may instruct the dynamic routers where to route data traffic and Para.[0026] A dynamic router may force the packet to be forwarded to the stream's final destination by placing on the packet the IP address of the next-hop dynamic router. A path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the various controllers may be responsible for communication and specific activities related to their controller entities).

Tirosh further discloses *the first router including a address conversion information provider configured to provide the address conversion information in accordance with a request from the routing controller* (Fig.1 ref.100b,100c, or 100d can be a first router and Para.[0026] telling all dynamic routers on the path their downstream dynamic router).

Tirosh further discloses *a first address conversion information manager configured to create and manage the second address conversion information in accordance with the request from the routing controller and to convert a destination address of received data based on the second address conversion information* (Para.[0021] may instruct the dynamic routers where to route data

traffic and Para.[0026] a path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the various controllers may be responsible for communication and specific activities related to their controller entities).

Tirosh further discloses *a first routing processor configured to perform a routing processing of the data converted by the first address converted* (Para.[0026] forwarding a packet to a router).

Tirosh further discloses *the second router including a second address conversion information managed configured to create and manage the first address conversion information in accordance with the request from the routing controller and to convert a destination address of received data based on the first address conversion information* (Fig.1 ref.100a is a second router and Para.[0021] may instruct the dynamic routers where to route data traffic and Para.[0026] a path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the various controllers may be responsible for communication and specific activities related to their controller entities).

Tirosh further discloses *by encapsulating the destination address of the received data with the IP address of the first router* (Para.[0026] A dynamic router



may force the packet to be forwarded to the stream's final destination by placing on the packet the IP address of the next-hop dynamic router.).

Tirosh further discloses *a second routing processor configured to perform a routing processing of the data converted by the second address converter using the IP address of the first router* (Para.[0026] forwarding a packet to a router and Para.[0028] The traffic entering the dynamic router may be routed to the dynamic router using the declared IP addresses).

Tirosh further discloses *deleting first address conversion information* (Para.[0029] Egress packets may be treated to erase or strip the tags inserted at an ingress router and forwarded to the proper termination IP address).

Tirosh does not explicitly disclose *requesting to delete address information and an address conversion information deletion permission requester configured to request the routing controller to permit deletion of the first address conversion information; and the second address conversion manager deletes the first address conversion information upon receiving the deleting permission from the routing controller.*

Kimchi discloses *requesting to delete address information and an address conversion information deletion permission requester configured to request the routing controller to permit deletion of the first address conversion information; and the second address conversion manager deletes the first address conversion information upon receiving the deleting permission from the routing controller* (Para.[0214] This transaction allows the user to request the server to

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remove an existing address book entry from the local replica of the address book when sending it to the server, or when received from the server, the client is required to delete the provided users from its address book).

Tirosh and Kimchi are analogous because they both pertain to data communications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tirosh to include requesting a router to delete address information as taught by Kimchi in order to maintain updated routing and topology information.

### ***Response to Arguments***

1. Applicant's arguments filed 3/18/2011 have been fully considered but they are not persuasive.

In the remarks, Applicant contends the limitation "the address conversion information acquired from the first router" has proper antecedent basis, citing lines 12-13 of claim 1 "configured to request provision of address conversion information to the first router".

The Examiner respectfully disagrees. There is no prior recitation of the address conversion information being acquired from the first router.

Furthermore, it appears the limitation "configured to request provision of address conversion information to the first router" refers to requesting an address conversion to a first router, as opposed a request being sent to a first router.

In the remarks, Applicant contends Tirosh does not disclose requesting provision of address conversion information to the first router in accordance with reception of the trigger.

The Examiner respectfully disagrees. Tirosh does disclose requesting provision of address conversion information to the first router in accordance with reception of the trigger (Para.[0011] A network manager unit may dynamically update the dynamic router such that the set of possible output path is changed and Para.[0021] providing information for routing and Para.[0026] and Fig.1 – packets are sent from the source to the destination through a dynamic router (specific router)). A trigger is generated based on the need to reroute through a first router because of a fault or topology change (Fig.1 ref.400 and Para.[0038-0040] sending a trigger when a fault is detected – where the determined need to route through a specific router is rerouting because of a fault of a topology change). The routing controller requests provision of address conversion information (Para.[0021] may instruct the dynamic routers where to route data traffic and Para.[0026] A dynamic router may force the packet to be forwarded to the stream's final destination by placing on the packet the IP address of the next-hop dynamic router. A path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the various controllers may be responsible for communication and specific activities related to their controller entities). After a fault, when a dynamic router is

instructed, that is requesting provision of address conversion information to the first router because the route is changed to include the first router.

In the remarks, Applicant contends Tirosh does not disclose a routing controller requests a specific router to change generated address conversion information.

The Examiner respectfully disagrees. Tirosh does disclose a routing controller requests a specific router to change generated address conversion information (Para.[0021] may instruct the dynamic routers where to route data traffic and Para.[0026] A dynamic router may force the packet to be forwarded to the stream's final destination by placing on the packet the IP address of the next-hop dynamic router. A path is first opened by telling all dynamic routers on the path their downstream dynamic router and associating with the path a unique label which is advertised to the dynamic routers on the path and Para.[0033] the various controllers may be responsible for communication and specific activities related to their controller entities). The routing information is changed as the routes change.

### ***Conclusion***

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ADHAMI whose telephone number is (571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohammad S Adhami/  
Examiner, Art Unit 2471

/Chi H Pham/  
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